

SODBURY RURAL DISTRICT COUNCIL

ANNUAL REPORT

of the

Medical Officer of Health

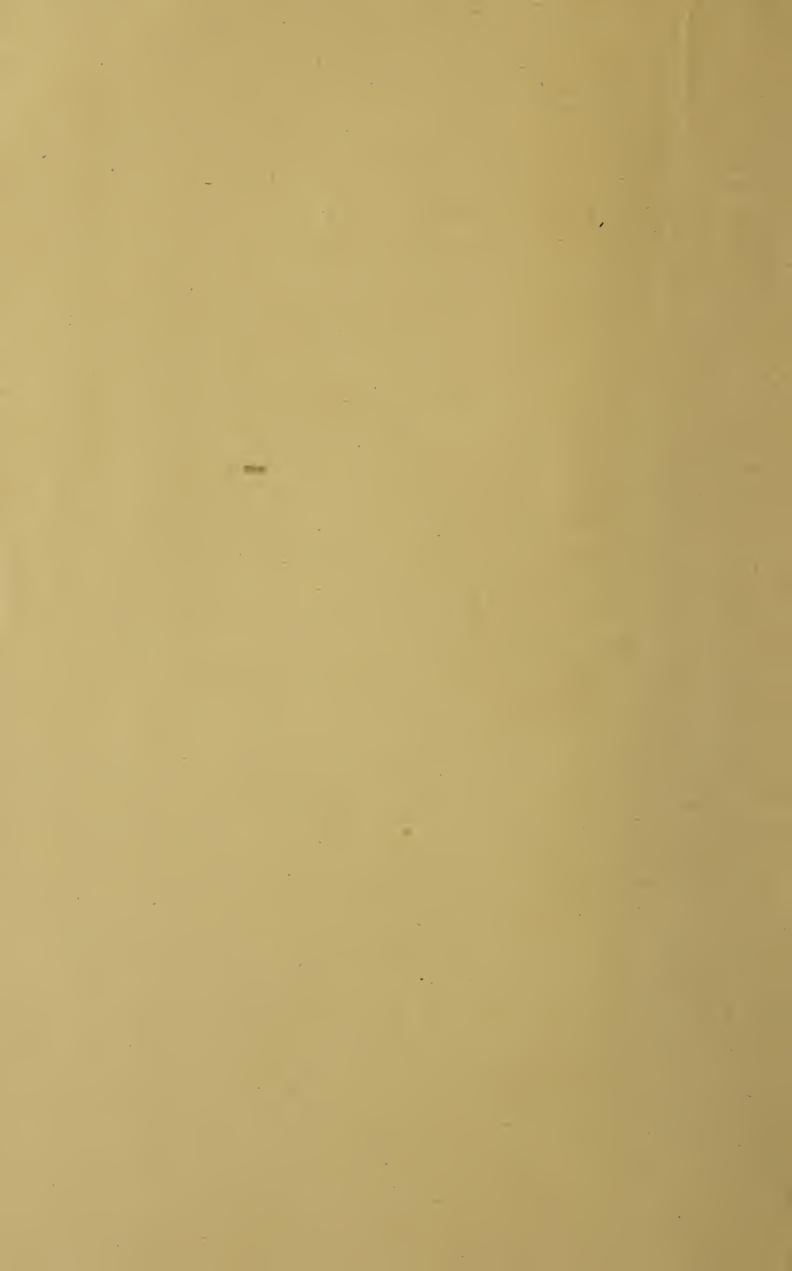
and

Chief Sanitary Inspector

FOR THE YEAR

1947

(Serial Number of Report—35)



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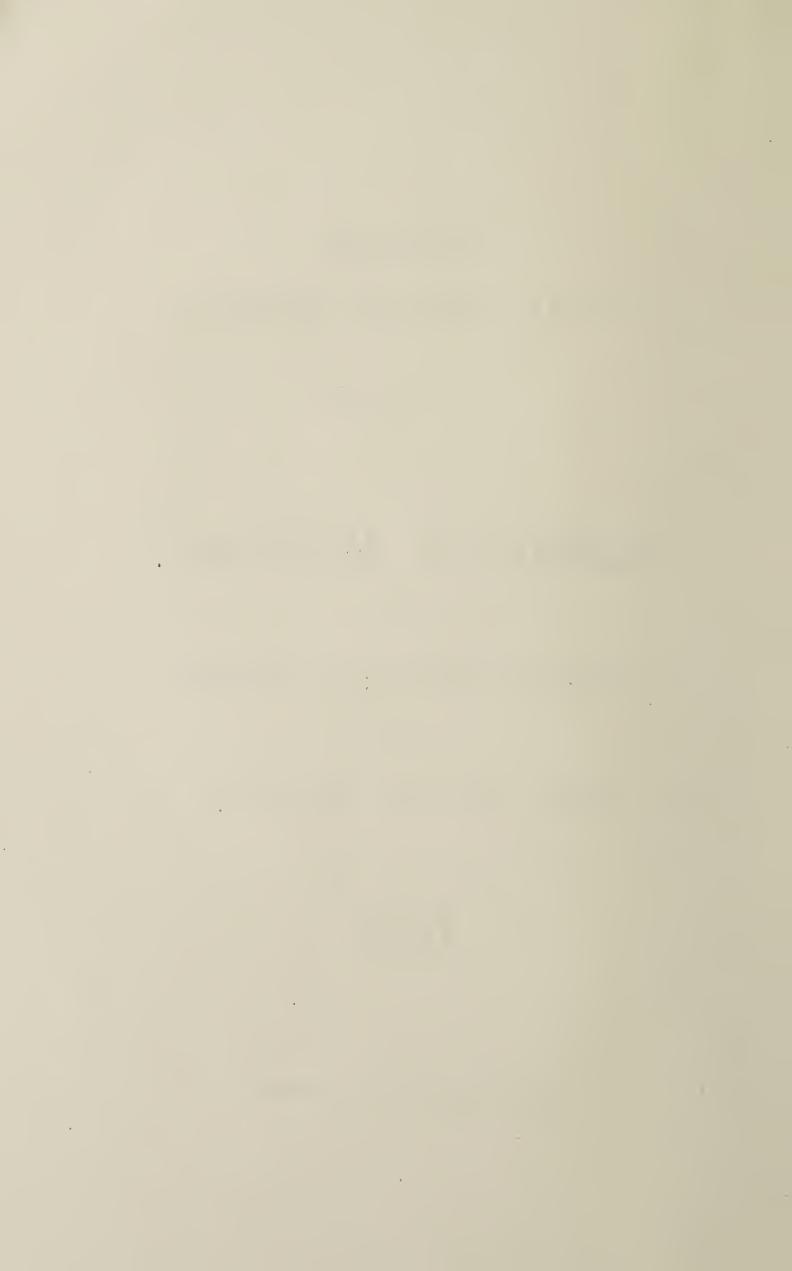
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SODBURY RURAL DISTRICT

Composition of District—

Parishes of Acton Turville, Alderley, Badminton, Cold Ashton, Dodington, Doynton, Dyrham and Hinton, Frampton Cotterell, Filton, Horton, Hawkesbury, Iron Acton, Little Sodbury, Marshfield, Pucklechurch, Sodbury, Stoke Gifford, Tormarton, Westerleigh, Wick and Abson, Wickwar, Winterbourne, Yate.

Chairman of Council-

R. G. Sherwood Hale, Esq., The Mount House, Alderley, Wotton-under-Edge, Glos.

Clerk to Council—

L. C. St. LEGER YEEND, A.C.I.S., A.L.A.A., D.P.A.

Medical Officer of Health-

J. Menzies Cormack, M.B., Ch.B., D.P.H., D.P.A.

Inspectorate-

Chief Sanitary Inspector ... R. S. Shears, M.S.I.A.

Inspectors ... H. S. Hale, M.S.I.A., M.R.S.I.

G. Fry, M.S.I.A.

Clerks-

K. R. RAWLINGS (From 3rd March, 1947)
B. C. MINETT, (Miss) (From February, 1947).
J. Lucas (Pupil Clerk).

Sewage Works Attendants—

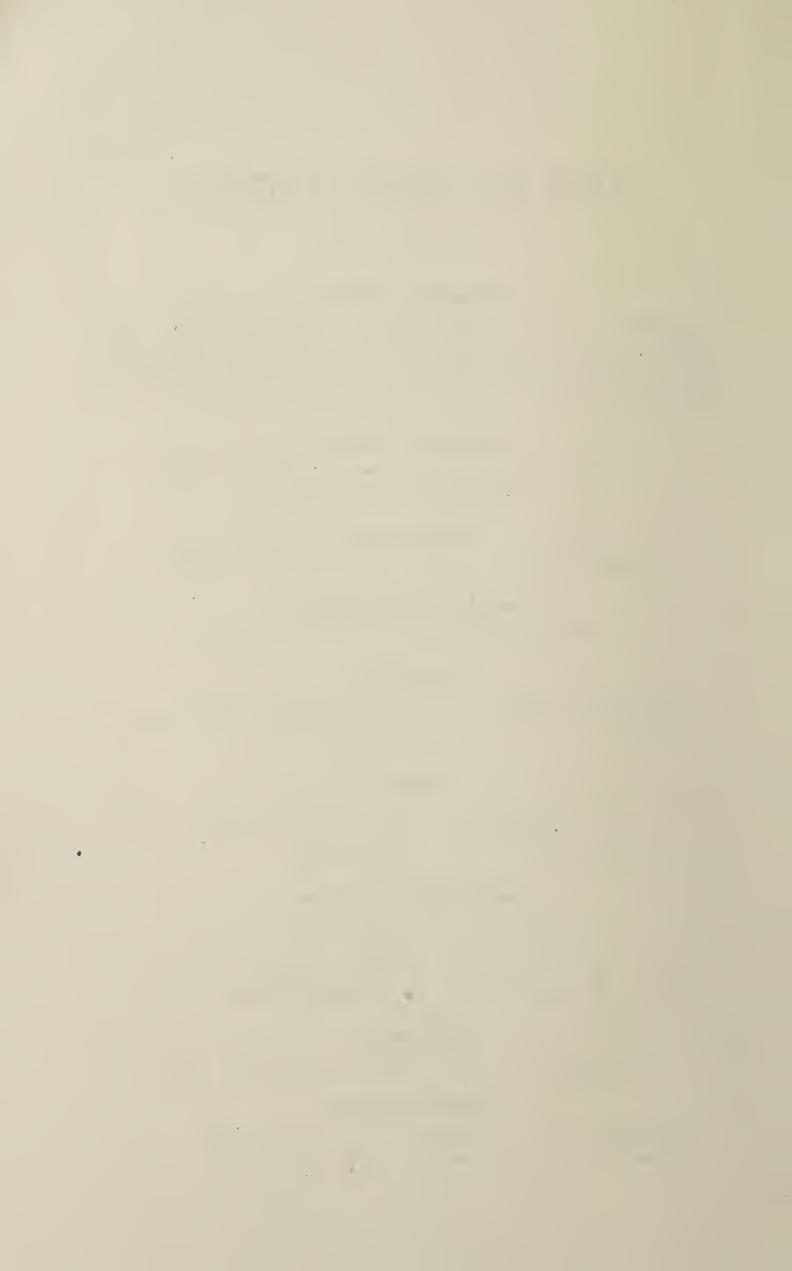
A. S. Huggins ... Yate Works.
C. Dando ... ,, ,,
H. W. Gothard ... Wickwar Works.
W. Hicks ... Marshfield Works.

Water Works-

E. PINCOTT ... Hawkesbury Water Works.

Public Conveniences—

Marshfield ... Attendant ... HICKS, (Mrs). Filton ... Attendant ... W. Elliott.



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

AND

CHIEF SANITARY INSPECTOR

Council Offices, Chipping Sodbury,

September, 1948.

To the Chairman and Members of the Sodbury Rural District Council.

Mr. Chairman and Members,

I present the Annual Report for 1947, being the 35th in the series and the 10th during my term of office.

The year under review may fairly be claimed to be one of solid achievement and the vigorous policy of the Council in the realms of housing and sanitary administration generally have been fully implemented by your staff.

It is to be hoped, however, that it will be possible to so accelerate the housing programme, that the problem of the absolescent and unfit houses may again receive attention. The problem is a serious and urgent one from the health point of view, allied as it is in some instances with the lack of a main water supply and inadequate sewerage facilities.

I trust therefore to be able to record in my next report that substantial progress has been made in respect of the various water and sewerage schemes sponsored by the Council.

I am,

Your obedient servant,

J. MENZIES CORMACK,

Medical Officer of Health.

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STATISTICS 1947.

General Stat	istics.					
Population (Estimated no Rateable Va		eral's e ed hou	uses (I	ecem	d—1 ber– 	–Rate Books) 9,799 £189,679
Extracts from	m Vital Statist	ics.				
		Tota	l. M.	F.		
Live Births-	-Legitimate	713	386	327	• • •	Birth Rate per 1,000 estim-
	Illegitimate	29	16	13		ated resident population mid-1947. 20.3
						England and Wales. 20.5
Still Births—	-Legitimate	25	14	11		Rate per 1,000 Civil popu-
	Illegitimate		1	1		lation7
						England and Wales5
Deaths.						
Infants	Legitimate	15	7	8		Rate per 1,000 live births. 22
under 1 year	Illegitimate	1	1	0		England and Wales. 41.
Deaths (Tota	al)	353	196	157		Death Rate per 1,000 estimated average population. 9.6.

England and Wales. 12.0

SOCIAL CONDITIONS.

In my report for 1938 I mentioned that the rapid expansion of Filton was a noteworthy feature. I pointed out that in the 10 years from 1928 to 1938 the population had increased from about 800 to 10,000. The population of this area is now estimated at 16,000. This development is almost entirely associated with aircraft industry.

Similarly, but at a much less rapid rate, Yate has developed, although not only in association with aircraft industry.

The population of Sodbury Rural District as a whole has increased from 23,880 in 1938 to 36,980 in 1948. As a matter of interest I have tabulated these figures.

The health of the area has remained excellent and no serious epidemics have occurred.

Minor outbreaks of enteric disease, poliomyelitis, and diphtheria have occurred, and continued vigilance is required to reduce their dissemination.

The major feature of social conditions still remains the need for houses so that each family unit may be independently housed.

The following is a list of principal trades in the Area—as listed in accordance with the Factory Inspector's Register.

· · · · · · · · · · · · · · · · · · ·		_
Aircraft Manufacturers		6
Laundry and Cleaning Works		1
Concrete Block Manufacturers		2
Household Appliances		1
Electric Machinery and Motors		5
Saw Mills	• • •	2
Colour Manufacturers and Lead Chromate		2
Concrete Tile Manufacturers		2
Letter Press Printing		2
Tailors		2
Grist Manufacturers		2
Coach Painting and Cellelose Spraying		1
Machinery Repairs		1
Mortar, Lime Burning	• • •	2
Rag Flock Mills		$\bar{1}$
Stone Sawing and Planing		ī
Cider Manufacturers		1
Carpenters	• • •	7
Coal Gas		i
Brick Manufacturers		$\tilde{1}$
Tarmacadam Manufacturers		ĩ
Bakehouses		10
Strentium, Ore and Fluorspar Grinding	• • •	1
Motor Vehicle Repairs	•••	$1\overline{2}$
Wheelwrights	•••	3
Agricultural Engineers	• • • •	1
Other Trades	• • •	3
Plumbers	•••	1
D1 1 '/1	• • •	. 4
Blacksmiths	• • •	T

POPULATION.

Birth Rates and Death Rates for the last Twenty years.

Year.	Birth Rate.	Death Rate.	Population.
1947	20.3	9.6	36,580
1946	18.7	9.5	35,620
1945	20.4	9.9	33,570
1944	21.0	9.9	33,720
1943	21.0	10.8	33,720
1942	20.6	9.4	33,860
1941	17.5	10.9	32,760
1940	17.6	12.2	34,210
1939	18.2	8.7	31,310
1938	17.1	11	28,660
1937	13.1	11.0	27,640
1936	14	11.3	26,070
1935	15	11.5	25,170
1934	14.4	11.4	25,220
1933	13.4	12.5	25,150
1932	15.6	12.8	25,120
1931	15.9	10.7	24,580
1930	14.4	10.4	23,800
1929	17	13.4	23,800
1928	14.3	11.3	23,880

Although the Birth Rate shows material increase over these 20 years it should be noted that the maximum number occurred in years 1943—44.

Figures for the County as a whole do not indicate that the population is continuing to increase as in the past, but popular opinion is in the habit of estimating from experience in the 19th Century. Estimates based on scientific research indicate that the number of persons in the Country tends to remain stationary at present.

Table showing Principal Causes of Death, 1947.

	Cause of Death	Und. 1 yr.	1–5 yrs.		15–25 yrs.		45–65 yrs.	65–75 yrs.	75 & over	Total
1.	Typhoid and para-									
	typhoid fevers	-								_
	Cerebro-spinal fever			—			—		_	
	Scarlet Fever		<u> </u>	—		—				
4.	Whooping Cough	-	_	-		_		—		-
0.	Diphtheria Tuberculosis of	-	_	_	_	_		-	_	_
0.	respiratory system				$\stackrel{+}{\scriptstyle \perp}$	5	6	1		14
7.	Other forms of tuber-	1 -	1		-					14
	culosis	_	<u> </u>		1	1		_		2
8.	Syphilitic Disease							_		—
9.	Influenza	_	l —	—		_	2	4	4	10
	Measles	-			-		_	<u> </u>	<u> </u>	
11.	Acute poliomyelitis									1
19	and polioencephalitis Acute infectious en-	-	-			1			_	1
12.	cephalitis						-			_
131	I Cancer of buccal									
	cavity and œsopha-									
	gus (males only)			-		_	. 1	1	2	4
	Cancer of uterus	_			_	1	1	2		4
14.	Cancer of stomach		:				_			
15	and duodenum			<u> </u>		1	5	2	1	$\begin{vmatrix} 9 \\ 2 \end{vmatrix}$
1	Cancer of breast Cancer of all other		_	_	-	1	2	-	_	3
10.	sites					3	15	9	1	28
17.	Diabetes				_	<u>"</u>				_
	Intra-cranial vascular									
	lesions		<u> </u>	_	· —	_	5	11	13	29
1	Heart Disease	1	1	_	2	9	28	40	55	136
$\mid 20. \mid$	Other diseases of the									
91	circulatory system	_	_		-		$\frac{2}{1}$	$\frac{2}{2}$	6	10
	Bronchitis Pneumonia	3	$\frac{}{2}$	-	_		4	$\begin{vmatrix} \cdot & 2 \\ 2 \end{vmatrix}$	15 11	$\begin{array}{ c c }\hline 18 \\ 22 \\ \end{array}$
1	Other respiratory	0	2			-	12		11	22
-0.	diseases	_				1			1	2
24.	Ulceration of stomach							V.		-
	or duodenum			—		1	1	1		3
25.	Diarrhoea (under 2									
00	years of age)	1		<u> </u>		<u> </u>	<u> </u>	—	—	1
	Appendicitis		_	-	-	-	·	-	-	
21.	Other digestive diseases						9	2	1	5
28.	Nephritis						$\frac{2}{2}$	$\begin{bmatrix} 2 \\ 5 \end{bmatrix}$		7
	Puerperal and post									
	abortive sepsis	<u> </u>	_	_			_	1	_	1
1	Other maternal causes				1	_	_	_	_	1
1	Premature birth	3	-	-	_	<u> </u>		-	_	3
32.	Congenital malform-									
	ations, birth injury infantile disease	5								5
33	Suicide				1		1		1	$\begin{bmatrix} 5 \\ 3 \end{bmatrix}$
	Road Traffic				1	}				
1	accidents			-		ı	1	_	_	2
	Other violent causes	-		_	-	1	3	—	1	5
36.	All other causes		1	1_1_	1	6	5	4	7	25
	TOTALS	13	4	1	8	32	87	89	119	353

INFECTIOUS DISEASE.

Tables indicating the incidence in age groups and in Parishes are given separately.

Although there was a nationwide epidemic of Poliomyelitis during the year, only 4 cases were notified in the Rural Area. Unfortunately, one young woman died—she was almost certainly infected in Scotland. A feature of this epidemic however, was the high age incidence throughout the country.

A large number of cases of measles were notified but the actual incidence was probably greater since it is unlikely that all cases were notified. The conditions, however, was usually mild and very few serious complications occurred.

The following table indicates the present state of immunisation against Diphtheria in Sodbury Rural District.

IMMUNISATION IN RELATION TO CHILD POPULATION.

Number of Children who had completed a full course of Immunisation at any time up to 31st December, 1947.

Age at 31, 12, 47, i.e. Born in Year	Under 1 1947	$\begin{array}{ c c }\hline 1\\1946\end{array}$	$\frac{2}{1945}$	$\begin{array}{ c c }\hline 3\\1944\\ \end{array}$	$\frac{4}{1943}$	5-9 1938-42	$ \begin{array}{c c} \hline 10-14 \\ 1933-37 \end{array} $	Total under 15
Number Immunised:	17	380	361	616	504	2200	1569	5,647
Estimated Mid- year Child Population 1947	Ch		n und 590	er 5		Childre 55	i i	9,100

Scabies.

The Scabies Order 1941 has lapsed since 31st December, 1947. Cases of this disease are still found but are much less frequent than during the War years. Arrangements for treatment at Bristol Clinics are in force and ambulance transport is provided where necessary.

Table showing Incidence of Infectious Disease in Age Groups. 1947.

TOTAL	83	-	9	304	ы	50	4	-	17	92	1		
65 & over							1	1			1	1	
45-65			73	П	ı	81							
35-45			81	က		12			- =			1	
20-35		-	-			12	_	-					
15-20				7		13		1	•	-			
10-15				13	.	က			4	ા			
5-10	н		7	150		9			10	23			
4-5				38					-	11			
3-4				45						7			
2-3	П			26			-		-	o			
1-2			1	17		.	1		ł	19		1	
Under 1		ļ		41	67	П	1			က			
ů	:	:	•	•	eonatorum	•	:	exia	•	ugr	:	ethargica	
Disease .	Diphtheria	Dysentery	Erysipelas	Measles	Ophthalmia Neonatorum	Pneumonia	Poliomyelitis	Puerperal Pyrexia	Scarlet Fever	Whooping Cough	Malaria	Encephalitis Lethargica	

Malaria Lethar-Encepalitis gica Whooping Cough 94 Scarlet Fever 10 Pyrexia Puerperal myeli-Polioťas 4 Pneumonia $\tilde{50}$ Ophth-almia Neonatorum **©1** Measles 10 302Erysip-elas 9 Dysen-Diphth-eria 03 : Frampton Cotterell Doynton Dyrham & Hinton Chipping Sodbury Acton Turville Little Sodbury Winterbourne Coalpit Heath Alderley ... Wickwar ... Pucklechurch Frenchay ... Stoke Gifford Parish. Hillesley ... Old Sodbury Hawkesbury Cold Ashton Badminton Westerleigh Codrington Iron Acton Hambrook Tormarton Marshfield TOTAL Dodington Doynton Horton Filton Wick

Table showing Incidence of Infectious Disease in Parishes. 1947.

TUBERCULOSIS.

New Cases and Deaths in Age Groups. 1947.

		NEW (CASES			DEA'	THS	
Age	Respi	ratory	Non- Respiratory		Respir	atory	Non- Respiratory	
	M.	F.	M.	F.	M. F.		M.	F.
Under 1 year 1-5 years 5-15 ,, 15-25 ,, 25-35 ,, 35-45 ,, 45-55 ,,• 55-65 ,, 65 upwards	$ \begin{array}{c} - \\ 4 \\ 13 \\ 10 \\ 10 \\ 4 \\ - \\ \hline 1 \end{array} $	3 8 10 3 3 —	1 2 2 — —					
Totals	43	27	5	4	8	5		

HOUSING.

On 27th May, 1946, the Council resolved that the letting of Council houses should be the duty of the Medical Officer of Health after consultation with local district Councillors. Although this matter has been reviewed many times, the above instruction remains in force.

Early this year an increase in applications—and also, fortunately, allocations—made it clear that a wholetime assistant was required, and the Council appointed a Clerk to the Public Health Department who commenced duty on the 3rd March 1947.

Tenants are selected by consultation with appropriate local Councillors after the preparation of a list of applicants according to a "points scheme." This "points scheme" has now been in force for some years and has been found a good indicator of general need of the applicant; although in practice, as with the majority of points schemes, a points allocation cannot be accepted as a final deciding factor. Usually the applicant is visited and the application confirmed before final allocation.

Court Order has been made for eviction. Almost all such applicants have been rehoused although this has meant deferment for others.

The problem is only one of many associated with the choice of families where many are necessitous but only a few can be chosen. I am glad to say that it has been possible to assist the majority of

families where the problem of Tuberculous infection was an added difficulty.

The following tables give an indication of the housing position on 31/12/47:—

Applications 1,704
Allocations 294

During the year ending 31–12–47, 110 houses were completed and 3 houses requisitioned providing accommodation for 114 families.

Rehoused :--

Family .	No children	l child	2 children	3 children	4 or more	TOTAL.
Ex-Service	5	. 98	57	12	7	179
No-Service	3	49	47	3	13	115

Applicants :-

Family	No children	l ch i ld	2 children	3 children	4 or more	TOTAL.
Ex-Service	214	330	133	. 35	23	735
No-Service	294	260	233	86	96	969

ANNUAL REPORT

YEAR 1947

ON THE

ENVIRONMENTAL HEALTH SERVICES.

HOUSING.

Rural Housing Survey was completed and the results are appended:-

RURAL HOUSING SURVEY.

	NON.	AL HOU	TOG DATE			
Type of Property	Reason- ably fit in all respects	Minor Defects	Requiring repairs	Appropriate for reconditioning	Unfit for habitition beyond repair	
Parish	Category	Category 2	Category 3	Category 4	Category 5	Totals.
Acton Turville Alderley Badminton Cold Ashton Dodington Doynton Dryham & Hinton Filton Frampton Cotterell Hawkesbury Horton Iron Acton Marshfield Pucklechurch Sodbury Old Sodbury Cold Sodbury Uittle Sodbury Stoke Gifford Tormarton Westerleigh Wick & Abson Wickwar Winterbourne Yate Council Houses all Parishes Totals	$\begin{array}{c c} - & - & - & - & - & - & - & - & - & - $	8	$\begin{array}{c c} 17 \\ \hline \\ 27 \\ 33 \\ 18 \\ 16 \\ 16 \\ \hline \\ 73 \\ 99 \\ 6 \\ 61 \\ 135 \\ 122 \\ 122 \\ 58 \\ \hline \\ 20 \\ 23 \\ 57 \\ 43 \\ 49 \\ 174 \\ 83 \\ \hline \\ \\ 174 \\ 83 \\ \hline \\ \\ \\ 1,250 \\ \hline \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 	54
Percentage of Totals	55.06	19.43	13.98	6.3	5.23	100%

Repairs.

Statutory Notices to effect essential repairs were served under Section 93 of the Public Health Act, 1936. Summary proceedings for non-compliance were necessary in one instance and an Order was made.

Housing Act, 1936. Section 11.

Demolition Orders were made in respect of five premises during the year under review.

Housing Act, 1936. Section 12.

A Closing Order in respect of two rooms at premises known as No. 3 Flaxpits Lane, Winterbourne, was made.

Defence Regulations 68AA.

Renewal of Licences for temporary occupation in respect of 8 premises, which are the subject of confirmed Clearance Orders, were made.

STATISTICS.

	No.
Total number of houses inspection for housing	
defects (under Public Health or Housing Acts)	574
Number found to require repairs	131
Informal Notices served	131
Informal Notices not complied with at end of year	29
Statutory Notices served	103
Statutory Notices not complied with at end of year	26
Number of visits made for re-inspection and super-	
vision of repairs	509
Houses found to be unfit for habitation	5
See also Rural Housing Survey.	

SEWERS AND SEWERAGE.

Maintenance.

The amount of maintenance work required was not unduly heavy and has been confined chiefly to the Parish of Filton where 12 cases of blocked sewers are recorded.

Public Health (Drainage of Trade Premises) Act, 1937.

Trade effluents were sampled under this Act and the system of automatic sampling devised in collaboration with the Bristol Corporation was effective and saved much time and labour.

Sewage Works.

(a) Marshfield. The retaining walls of the two filter beds have been renewed. It is difficult to understand why in works of such recent construction no adequate provision was made for the cleaning of detritus chambers and the disposal of storm water. The latter omission was undoubtedly partially responsible for the necessity to renew the filter bed retaining walls. The works were completed in 1938.

Samples of the effluent have been satisfactory as regards Biological Oxygen Demand figure, but the suspended solids figure has been too high.

- (b) Wickwar. These works constructed nearly 50 years ago have been modernised by the addition of sludge drying beds, pump house and sludge well. Effluent samples are uniformly good and satisfy the required standards:
- (c) Yate. Despite the dual handicap of obsolescence and overloading, the overall improvement at these works recorded in the last report has been sustained. Monthly reports of effluent satisfy the Royal Commission Standards, but work of enlarging and modernising these works, is, however, long overdue. A marked improvement has followed the provision of additional suitable labour on the 14/2/47.

Sewage Pumping Stations.

Under agreements made in 1937/39 with developing owners in the Parish of Filton, the proviso was made that sewage pumping stations should be installed due to the lack of a gravitation sewer in the Eastern half of the Parish. The four Stations, under the terms of the agreement, became the Council's complete responsibility during the year. But for the war a ring sewer would undoubtedly have been laid to eliminate these stations before the expiry of the agreed periods. However, these Stations have proved a continual source of trouble, expense and no little anxiety, particularly having regard to the fact that only one Station has duplicate plant. Due to a resumption of building activity, the Council applied to the Minister of Health to proceed with the ring sewer. A public enquiry was held on the 4/11/47, at the Memorial Hall, Filton, by Mr. H. F. Maloney, M.A., M.I.C.E., Ministry of Health Inspector, and I hope that this project will be accelerated in view of the difficulties of running these inadequate Stations.

WATER SUPPLIES.

With the exception of the Parish of Hawkesbury where the water supply is under the control of the District Council, the supply is afforded by the West Gloucestershire Water Company, Kingswood, Bristol.

The report of the Water Company states:—

85 Output water samples were taken during 1947, and no samples were found unsatisfactory in the Council's area.

A constant supply was maintained throughout the Company's area during the year: this was not achieved without difficulty in the parishes of Chipping Sodbury, Yate, Wickwar and Iron Acton. Steps are in hand for strengthening the distribution in these parishes.

None of the Company's water have plumbo-solvent action.

All Company's waters leave the sources with a minimum chlorine content of 0.1 part per million.

The number of dwelling houses supplied in the respective parishes on the 31st December, 1947, and the sizes and lengths of mains laid in these parishes during 1947, were as follows:—

Parish.		Total Domestic connections	Mains lai	d in 1947.
Fallsii.		31/12/47.	Diameter.	Yards.
Acton Turville		70		
Badminton	• • •	102		
Chipping Sodbury	• • •	296		
Dodington	• • •	37		
Doynton	• • •	60	3"	10
3			4"	*147
Dyrham & Hinton	• • •	<u> </u>		
Filton	• • •	3,156	3"	126
			4"	603
			6"	373
Frampton Cotterell	• • •	584	4"	Р399
Hawkesbury		41		
Horton	• • •	2		
Iron Acton		150		
Little Sodbury		6	<u> </u>	
Marshfield		248	.3"	57
			4"	39
Old Sodbury		295		
Pucklechurch	• • •	185	6"	394
Stoke Gifford	• • •	311		
Tormarton		47		
Westerleigh	• • •	391		
Wick & Abson	• • •	201		
Wickwar	• • •	184		
Winterbourne	•••	1,038	-	
Yate		419		-

^{*} Replacing 1" main.

WATER SUPPLY

Analysis of a sample of water received on January 6th, 1948, from West Gloucestershire Water Company:—

Labelled: Shipton Moyne, Consumer's Tap, Chlorinated water; taken by C. W. Hooper. Date: January 5th, 1948, 10.30 a.m.

Chemical results expressed in parts per million.

Appearance—Very faint opalescence with a very slight flocculent deposit of iron oxide.

Turbidity (Silica Scale) Less than 5.

Colour (Hazen) Nil.

Odour. Nil.

Reaction, pH Neutral: 7.4 Free Carbon Dioxide 14.

Electric conductivity at 20°C. 615. Alkalinity as CaCO₃ 240.

Ca	Mg	Na	CO ₃	SO ₄	CI	NO3	SiO ₂	Probable Combinations	
79	9.4		144	48	49	A	16		
79			118					Calcium Carbonate 197	
	9.4		23					Magnesium Carbonate 32	
		2	3					Sodium Carbonate 8	
		23		48				Sodium Sulphate 71	
		34			49			Sodium Chloride	83
							16	Silica	16
	Difference							1	
	Total solid constituents dried at 180°C								405

* Hardness—Total 235. Carbonate (Temporary) 235. Noncarbonate (Permanent) 0.

Nitrogen in Nitrates 0.0. Nitrogen in Nitrites, Less than 0.01. Free Ammonia: 0.20 (N.: 0.16) Free chlorine 0.07.

Albuminoid Ammonia 0.000 (N:0.000) Oxygen absorbed in 4 hours at 27°C. 0.00.

Metals—Iron: 0.54. Other metals absent.

Fluorine (F.): 0.3.

* Hardness: the precise figure calculated from calcium and magnesium contents.

BACTERIOLOGICAL RESULTS.

(Bacteriological sampling bottles are treated to remove free chlorine if this is present at the time of sampling).

Number of Colonies developing on Agar per c.c. or ml. in

1 day at 37°C.—5 2 days at 37°C.—7 3 days at 20°C.—7.

Presumptive Coliform Reaction Present in— Absent from 100 ml. Bact. coli.

Cl. welchii Reaction

Present in— Absent from 100 ml. Present in— Absent from 100 ml.

WATER SUPPLY.

Analysis of a sample of water received on 6/1/48 from West Gloucestershire Water Co:—

Labelled: Frampton Pumping Station, Output Water.

Taken by R. E. Price: Witness G. C. Brereton: Date 5/1/48, 10.55 a.m.

Chemical results expressed in parts per million.

Appearance:—Bright with a very few particles of mineral debris.

Tirbidity (Silica Scale) Less than 5.

Colour (Hazen) Nil.

Odour. Nil.

Reaction, pH On the alkaline side of neutrality: 7.7

Free Carbon Dioxide, 8.

Electric conductivity at 20°C. 690 Alkalinity as CaCO₃ 295.

Ca	Mg	Na	CO ₃	SO ₄	CI	NO ₃	SiO ₂	Probable Combinations.	
63	22		177	67	34	A	16		
63)	94					Calcium Carbonate 15	
	22		54					Magnesium Carbonate 7	
		22	29					Sodium Carbonate 5	
		32		67				Sodium Sulphate 99	
		22			4			Sodium Chloride	56
							16	Silica	16
	Difference								5
	Total solid constituents dried at 180oC 460								

^{*} Hardness—Total 250. Carbonate (Temporary) 250. Non-carbonate (Permanent) 0. Nitrogen in Nitrates 0.0. Nitrogen in Nitrites, Less than 0.01. Free Ammonia 0.11 (N: 0090) Free chlorine, 0.25. Albuminoid Ammonia 0.000 (N: 0.000). Oxygen absorbed in 4 hours at 27°C. 0.00 Metals absent. Fluorine (F): 0.4

BACTERIOLOGICAL RESULTS.

(Bacteriological sampling bottles are treated to remove free chlorine if this is present at the time of sampling).

Number of Colonies developing on Agar per cc. or ml. in

1 day at 37°C.—5. 2 days at 37°C.—7. 3 days at 20°C.—7.

Presumptive Coliform Reaction Present in—Absent from 100 ml. Bact. coli. Present in—Absent from 100 ml.

CI. welchii Reaction Present in— Absent from 100 ml,

^{*} Hardness: the precise figure calculated from calcium and magnesium contents.

HAWKESBURY WATER SUPPLY.

This scheme was completed in 1940, source of supply lies in the Kilcott Valley at a site near the Wine Cellar Spring. The well is 50 feet deep and the bore hole a further 20 feet. Rest level of water averages 10 feet.

Plant comprises One Centrifugal Lift Pump, Tangyes three throw ram pump, Wallace and Tiernan Automatic Chlorinating plant, all electrically controlled including an automatic float at the Hawkesbury Reservoir which controls the pumps. Recording by "Electroflo" meters.

Electric Motor 27 B.H.P. (Diesel Engine 20 B.H.P. as standby). Capacity of pumps 5,000 gallons per hour.

Height to which water is lifted—Hawkesbury Upton 400 feet.

Tresham. 384 feet.
Rising Main Hawkesbury Upton 4" 3012 yards.

Tresham 3" 2,541 yards.

Volume of water in Reservoir, Hawkesbury Upton Gallons.

High Level ... 35,000 Low Level ... 50,000

Total Capacity ... 85,000

Volume of water in Reservoir Tresham ... 7,500

Top water level O.D. Hawkesbury Upton. High Level 674.75

,, ,, ,, Low Level. 664.75

,, ,, ,, Tresham. 658.50

Depth of Reservoir in feet. Hawkesbury Upton.

High Level $7\frac{3}{4}$ ft.

Low Level. 11ft.

Depth of Reservoir in feet. Tresham 6ft.

There are approximately 3 miles of rising main and 7 miles of supply mains. Daily average consumption is 25,000 gallons.

Although sterile samples have been obtained of the raw water, all output water has a minimum chlorine residual of 0.1. parts per million.

The supply has been satisfactory in quality and in quantity; is not plumbo-solvent, and no action was necessary in respect of any form of contamination other than routine flushing of "dead" ends of mains.

Bacteriological examination is made monthly and a typical result is as follows:—

"Report on the Bacteriological Results of a Sample of Water from Sodbury Rural District Council." Micro-organisms in one cubic centimetre capable of growing on Agar at 22°C. in 3 days ... 4

Micro-organisms in one cubic centimetre capable of growing on Agar at 37°C. in 48 hours ... 4

B. Coli. Absent in 100 cubic centimetres.

Remarks:—"The examination shows that the bacteriological condition of this sample is satisfactory for a public supply."

County Analyst. 28–10–47.

The report on a chemical analysis on the water supplied expressed in parts per 100,000 is as follows:—

CHEMICAL ANALYSIS.

The sample contains (parts per 100,000):—

Total Dissolved Solids	• • •	• • •		31.3
Combined Chlorine	• • •	• • •		1.7
Nitrogen present as Nitra		• • •		0.040
Nitrogen present as Nitri	tes	• • •	• • •	0.0001
Mineral Ammonia	• • •	• • •		Absent
Organic Ammonia	• • •	• • •	* • •	Absent
Oxygen required to oxid	idise	the orga	anic	
matter in three hour	S	• • •		None
Temporary Hardness	• • •	• • •	• • •	18.5
Permanent Hardness	• • •	• • •	• • •	5.0
Total Hardness		• • •	• • •	23.5

Remarks—The analysis shows that this water in its present condition is satisfactory for a public supply.

County Analyst.

Estimated Population—Hawkesbury Parish	 1,450
No. of properties in Parish	 401
No. of dwellings supplied direct to houses	 140
Estimated population supplied direct to houses	 490
No. of dwellings supplied by means of stand-pipes	 149
Estimated population supplied by means of standpipes	 521
	l

A portion of the Parish comprising Little Badminton, Petty France and Dunkirk, are supplied from the West Gloucestershire Water Mains and due allowance has been made in the foregoing figures.

Trouble has been experienced on certain lengths of asbestos main by the corrosion of the detachable cast iron joints due to the action of sulphate reducing bacteria. Aluminium moulds have been obtained to enable all joints which demand renewal to be protected by pitch.

PUBLIC CONVENIENCES.

Chipping Sodbury.

Work was commenced by the Contractors on this Convenience.

Filton.

The Revenue derived during the year was £41 5s. 11d.

Marshfield.

The Revenue derived during the year was £9 8s. 6d.

The task of the Caretakers of these Conveniences is rendered far from easy or congenial by the misuse and vandalism which frequently occurs.

FACTORIES ACT, 1937.

There are 94 Power and 41 Non-Power Factories on the register. Informal action has secured improved sanitary accommodation in respect of 3 Factories, and Outworkers premises have been inspected.

MORTUARY.

Improvements to this Mortuary, including more adequate drainage of floor and the provision of a trolley and suitable vessels have been effected.

It has been used on 14 occasions during the year.

SLAUGHTER OF ANIMALS ACT, 1933.

All Licences are due for renewal on the 1st January, 1949. 47 Licences are now operative.

No new licences were issued during the year.

PETROLEUM (CONSOLIDATION) ACT, 1928.

Operative 1	Licences	to	store	Petroleum Spirit	• • •	84
,,	, ,	,	, ,,	Carbide of Calcium	• • •	11

Codes for the construction of Underground Storage Tanks and for the safe operation of electric petrol pumps were adopted in April 1947, and based on the regulations pertaining to the City of Bristol.

Home Office Circular No. 198/1947, advising the adoption of a Model Code for Petroleum Spirit Licences in respect of electrical equipment superseded those adopted by the Council.

FOOD AND DRUGS ACT, 1938. The following type of premises are recorded:—

10110 W 1118	5 type of premises are recorded.—	
Ice Cream.		14
Grocers Shops.	122121024748413488	
Wet Fish Shops.		10
Butchers Shops.		26
Fried Fish Shops.		10
Bake- houses.		19
Restaurant Kitchens.		15
		:
		•
ish.	nton	•
Parish.	urville con & Hi n Cott oury idd ifford on igh courne	ALS
	Acton Turville Badminton Dyrham & Hinton Doynton Filton Hawkesbury Iron Acton Marshfield Pucklechurch Sodbury Stoke Gifford Tormarton Westerleigh Wickwar Wickwar Wickwar Wickwar	Potals
	Yawa Washing St.	

General Remarks.

The 15 Restaurant Kitchens are under regular supervision, and a high standard of cleanliness is maintained; many improvements, with particular reference to flyproofing, having been secured. The co-operation of all owners has rendered unnecessary any Statutory action.

Structional alterations have been secured in respect of 3 Bakehouses, including the separation of the fueling of the ovens from the baking and preparation rooms. One new Bakehouse of modern design and construction has been erected in the Parish of Yate.

The standard adopted in respect of Fish and Wet Fish Shops, which in the former necessitates provision of suitable ranges, has obviated any nuisances arising.

Action was taken under Section 9 in respect of a quantity of rolled oats, sold and exposed for sale, containing rat and mice excreta. A fine of £10 was imposed.

ICE CREAM (HEAT TREATMENT) REGULATIONS 1947.

Of the 14 registered premises, there are 4 Manufacturers by the "Hot Mix" Method and 1 Manufacturer of Cold Mix Ice Cream. 7 Registered premises obtain supplies in bulk and the other 2 obtain prepacked supplies.

Manufacturers have willingly co-operated in securing high standards for their products and all have provided entirely separate rooms for the purpose.

SUMMARY OF REPORTS ON SAMPLES OF ICE CREAM.

Ref.	Coli per 100 ml.	Colonies per ml.	Bristol Report.	M. Blue Test.	M.O.H. Grade.	Type of Mix.
A.666 667 666	_ + _ _ + + +	80,000 72,000 270,000	Good Good Poor	$0\\ \frac{1}{2}\\ \frac{1}{2}$	4 3 3	Cold Cold Hot

FOOD HANDLERS.

As part of the education of all food handlers on the importance of personal cleanliness, the propaganda issued by the Central Council for Health Education is exhibited in appropriate places.

MILK—REGISTERED PREMISES.

Parish		T.T.	Accredited	Non Designated	Total '	Retail Only
Acton Turville	•••	1		4	5	
Alderley	• • •		1	3	4	
Badminton	• • •	5			5	
Cold Ashton	• • •	1	2	12	15	1
Codrington	• • •	1	$\frac{2}{3}$	3	7	
Doynton	• • •		6	11	17	
Dodington	•••		1	2	3	
Dyrham & Hint	on		1	10	11	
Frampton Cotte	rell	1	1	10	12	$\frac{3}{7}$
Filton	• • •		<u> </u>	—		7
Hawkesbury		$egin{array}{c} 3 \ 2 \ 1 \end{array}$	4	24	1	
Hillesley		2	<u> </u>	5	7	
Tresham	•••	1		3	4	
Horton		4	4	9	17	1
Iron Acton	•••	1	6	24	31	1
Marshfield	• • •	2	2	15	19	
Pucklechurch	• • •		5	12	17	
Stoke Gifford		1	2	12	15	
Sodbury, Little		1	3	1	5	
,, Chippi	.ng	1	1	5	7	_ _ 1
,, Old	• • •		9	7	16	—
Tormarton	• • •	1	2	6	9	1
Wick & Abson	• • •	2	2	16	20	
Wickwar	•••		8	14	22	
Wapley	• • •	1	2	8	11	
Westerleigh	•••	1	4	25	30	1
Winterbourne	• • •	1	4	26	31	1
Yate	•••	2	5	31	38	1
Totals	• • •	33	78	298	409	18

SUPPLEMENTARY LICENCES.

Sale of Tuberculin Test Milk	•••	• • •	8
Sale of Pasteurised Milk	• • •	• • •	4
Bottling Establishment Licenced	(T.T.)		1

227 Inspections were made of Cowsheds and Dairies during the year and structural improvements to 34 premises were secured in respect of applicants for designated Milk Licences.

MEAT AND OTHER FOODS.

(i) The number of animals (carcases and offal) inspected at the Westerleigh Abattoir and Stoke Park Colony, Stapleton, was as follows:—

Cattle	• • •	•••	• • •	• • •	624
Calves	•••	• • •	•••	• • •	21
Sheep and	Lambs	• • •	• • •	• • •	26
Pigs	•••	• • •	• • •	• • •	31

The weight of meat condemned as being unfit for human consumption was as follows:—

	Tons.	Cwts.	Qrs.	Lbs.
Beef	16	19	3	19
Mutton & Lamb			2	4
Pork		_	3	4
TOTAL	17	1	0	27

The incidence of disease in food animals slaughtered is shown in the following table:—

·	Cows	Calves	Sheep and Lambs	Pigs
Number killed Number inspected	624 624	21 21	$\frac{26}{26}$	31 31
All diseases except Tuber- culosis—				
Whole carcases con- demned Carcases of which some	4	—	1	_
portion or organ were condemned Percentage of number in-	205	_	_	-
spected infected with disease other than Tuberculosis	33.49%		3.84%	
Tuberculosis—		·		
Whole carcases con- demned Carcases of which some	59		_	
part or organ was condemned Percentage of number	217	_		<u> </u>
inspected infected with Tuberculosis	44.23%	_		

(ii) Other Foods Condemned.

Canned Meat	• • •	• • •	• • •	9,816	tins.
Lime Juice	• • •	• • •	• • •	3,510	tins.
Milk	• • •	• • •	•	65	tins.
Fish	• • •			166	tins.
Vegetables	• • •	•••	• • •	49	tins.
Jam		• • •	• • •	18	tins.

Cooking Fat	• • •	• • •	• • •	$\frac{3}{4}$ lb.	
Fruit	•••		•••	120 tins.	
Mince Meat	• • •		• • •	1 Jar.	
Meat.Paste	•••	• • •	• • •	4 Glass Containers	
Soup	• • •	• • •	• • •	50 tins.	
Cheese	• • •	• • •	• • •	3 lbs. 14 oxs.	
Dried Eggs	• • •	• • •	• • •	5 Packets.	
Oatmeal	• • •	• • •	• • •	6lbs.	
Dried Fruits	• • •	• • •	• • •	$4,006\frac{1}{2}$ lbs.	
Tomato Puree		• • •		1,108 lbs.	
Orange Juice	• • •	• • •		3 Bottles.	

Butchers Shops.

The following meat and offal was condemned in Butchers Shops:—

Beef-1,001 lbs-Bone Taint.

Livers (2) 23 lbs.—Distomatosis.

Calves Sweetbreads—6 lbs.

Carcase of Mutton—37 lbs.—Severe bruising—decomposition.

Fish Shops.

63 lbs. Smoked Codling Fillets.

28 lbs. Kippers.

PUBLIC CLEANSING AND SALVAGE SERVICES.

The whole area is now covered by the District Council, and the service includes the collection of ashes, but Trade Refuse in general is not collected.

The transport was centralised during the year, giving greater control, simplifying administration and proving economical.

The extended service necessitated the purchase of a Karrier 10 cube yard refuse vehicle, which is used in the Parish of Filton, where the amount of refuse is considerable.

Transport now includes :-

One Austin Lorry capacity—3 Tons.

One Austin Lorry capacity—3 Tons.

Two Karrier Bantams, each 7 cube yards capacity.

One Karrier Bantam, 10 cube yards capacity.

Personnel number 12, there being :—

Four Driver/Loaders.

Five Loaders.

Two Balers.

One Tipman.

Refuse Tips number 9. Control of rats is exercised by the Gloucestershire County Council under contract. Difficulty is experienced in obtaining adequate supplies of covering material, but on the whole the tips are reasonably well maintained.

Plant.

An Air Compressor and 500 gallon Underground Storage Petrol Tank with pump was installed during the year.

SALVAGE.

It is gratifying to record that the decline in tonnages of reclaimable materials appears to have been arrested. A Salvage Drive and various forms of publicity have contributed, but from inspections of the refuse tips, it is abundantly clear that the public response could be very much better.

1947.

			Tons.	Cwts.	Value.
Paper Kitchen Waste	• • •	• • •	160 193	17 19	948
Scrap Iron	•••	•••	12	7	31
Textiles	• • •	•••	8	. 12	164
Bones Bottles and Jars	•••	•••	2 2	15 14	13 23
Totals	•••	•••	Tons381	Cwts. 4	£1,549

The Net cost of the Public Cleansing and Salvage Services for the financial year 1st April, 1946, to 31st March, 1947, was £3,158 19s. 5d.

- (a) Net cost per ton of refuse collected— $10/5\frac{1}{2}$ d.
- (b) Net cost per 1,000 premises served per annum—£322 7s. 0d.
- (c) Net cost per Head of Population served per annum— 1s.87d.

FACTORIES ACT 1937

1. Inspections for purposes of provisions as to health (including inspections made by Sanitary Inspectors).

		Number of				
Premises	No. on Register	Inspections	Written Notices	Occupiers Prosecuted		
(1) Factories in which Sects. 1, 2, 3, 4 & 6 are to be enforced by Local Authorities	41	15	1	NIL		
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority	94	11	2	NIL		
(3) Other Premises under the Act (excluding outworkers premises)	NIL	NIL	NIL	NIL		
Totals	135	26	3	NIL		

Cases in which Defects were found.

		No. of cases in which defects were found.			
PARTICULARS.		Re		erred	Prose-
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	cuted
Want of Cleanliness Overcrowding Unreasonable Temperature Inadequate Ventilation Ineffective Drainage of Floors Sanitary Conveniences. (a) Insufficient	Nil Nil Nil Nil Nil		· — — — .	— — — —	Nil Nil Nil Nil Nil
(b) Unsuitable or defective (c) Not separate for sexes Other Offences	3 Nil Nil	3	— — —	— — —	Nil Nil Nil
Total	4	3		_	Nil

SUMMARY OF GENERAL INSPECTIONS.

Infectious Disease.				
Visits made	•••	• • •	• • •	41
	• • •	• • •	• • •	38
Disinfestations.				
Inspections and treatment of p	bremise	es.	• • •	32
Drainage.				
¥		• • •	• • •	338
Number of drains tested	• • •	• • •	•••	41
Visits for supervision of repair		• • •	• • •	32
Number of cesspools inspected			• • •	12
Number of cesspools found to				10
Number of closets inspected			1	81
Inspections of sewers and sewa	ge disp	osai w	orks	256
Food.				
<u> </u>	1 77 1 1		• • •	50
Visits to Meat Shops, Stalls and			• • •	101
and the state of t			• • •	48
Inspections of Food Shops and	premi	ses	• • •	172
General Inspections.				
			1	7.1
Amusement houses and hotels		• • •	• • •	11
Factories inspected	•••	• • •	• • •	26
Smoke observations	• • •	• • •	• • •	$\begin{array}{c} 22 \\ 23 \end{array}$
Moveable Dwellings		•••	• • •.	∠s 5
Schools Public Conveniences	• • •			93
Mortuaries	• • •	• • •		66
Pollution of Watercourses	• • •	• • •	• • •	$\frac{00}{26}$
Samples of Effluent taken	• • •	• • •		$\frac{20}{22}$
Control of Refuse and Salvage		• • •		$2\overline{46}$
Unclassified visits	• • •	• • •	•••	82
Inspections Under.				
Shop Acts				19
	•••	• • •	• • •	$\frac{15}{15}$
1 ctroledin ricts and Orders	•••	• • •	• • •	10
Water Supply.				
Number of visits in respect of				193
	•••	• • •	• • •	$\frac{193}{39}$
Statutory Notices served	•••			5°
Number complied with (Mains				5
Training vitti (maii)	SOITHICK	(20110)	***	Q



